Exhibit "SS" to Amended Verified Petition

MINED LAND USE - PLAN

FOR THE

KINGS HILL ROAD SHALE MINE

TOWN OF MONTGOMERY

ORANGE COUNTY, NEW YORK

Prepared for

MEHLON TRUCKING INCORPORATED

Wallkill, New York

Prepared by

WEHRAN ENGINEERING, P.C.

666 East Main Street

Middletown, New York 10940

WE Project No. 07534 EP

July 1988

Revised July 1998*

Revised March 2003*

*Updated, modified and expanded July 1998

And March 2003 by

VINCENT J. DOCE ASSOCIATES

13 NEW ROAD

NEWBURGH, NEW YORK 12550

Case 7:07-cv-10711-KMK

617.21

Appendix A
State Environmental Quality Review
FULL ENVIRONMENTAL ASSESSMENT FORM

SEOR

Purpose: The full EAF is defigned to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasureable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible to allow introduction of information to fit a project or action.

Full EAF Components: The full EAF is comprised of three parts:

- Part 1: Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.
- Part 2: Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.
- Part 3: If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

DETERMINATION OF SIGNIFICANCE—Type 1 and Unlisted Actions							
Identify the Portions of EAF completed for this project:							
Upon review of the information recorded on this EAF (Painformation, and considering both the magitude and impolead agency that:	ortance of each impact, it is reasonably determined by the						
have a significant impact on the environmen	important impact(s) and, therefore, is one which will not ent, therefore a negative declaration will be prepared.						
B. Although the project could have a significant effect for this Unlisted Action because the mitherefore a CONDITIONED negative declara	it effect on the environment, there will not be a significant itigation measures described in PART 3 have been required, ation will be prepared.*						
 C. The project may result in one or more large a on the environment, therefore a positive dec * A Conditioned Negative Declaration is only valid 	and important impacts that may have a significant impact claration will be prepared. for Unlisted Actions						
Kings Hill Roa	ad Shale Mine						
Name o	of Action						
Name of Le	ead Agency						
Print or Type Name of Responsible Officer in Lead Agency Title of Responsible Officer							
Signature of Responsible Officer in Lead Agency	Signature of Preparer (If different from responsible officer)						
Da	ate						

PART 1—PROJECT INFOHMATION

Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant efform the environment. Please complete the entire form, Parts A through E. Answers to these questions will be consider as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and speceach instance.

NAME OF ACTION Kings Hill Bond Shale Mine			
Kings Hill Road Shale Mine			
LOCATION OF ACTION (Include Street Address, Municipality and County)		······································	
Kings Hill Road, Town of Montgomery, Orange County, New York			
Mr. Leon Mehl, President, Mehlon Trucking Inc.		INESS TELEP	
ADDRESS OF THE PROPERTY OF THE		'	;
Post Office Box 519			-
Wallkill		STATE N.Y.	ZIP CODE 12589
NAME OF OWNER (If different)	BUSI	NESS TELEP	1
same as above	"	1	HONE
ADDRESS	1	'	
CITY/PO		STATE	ZIP CODE
DESCRIPTION OF ACTION			
Shale mining operation including blasting			
	4		
entre de la companya de la companya La companya de la co			
Physical setting of overall project, both developed and undeveloped areas. I. Present land use: □Urban □Industrial □Commercial □Residential (so ÖForest □Agriculture 對Other Quarry, Utility Fage)	սեսբե	an) 🗆 I	Rural (non-fa
	ment		·
APPROXIMATE ACREAGE RESERVE: APPROXIMATE ACREAGE			
Meadow or Brushland (Non-agricultural)	_Y	AFTER C	OMPLETION
dcl	es _	18.1	acre
140 acr	es _	130.2	acre:
Agricultural (Includes orchards, cropland, pasture, etc.)	es		acre
Wetland (Freshwater or tidal as per Articles 24, 25 of ECL) acre	es	.0	
Water Surface Area		0	acres
Unvegetated (Rock, earth or fill)			acres
Roads, buildings and other paved surfaces 1.4	<u> </u>	1 4	acres
Other (Indiana to)		1.4	acres
	≥5	10.2	acres
What is predominant soil type(s) on project site? <u>Both-Nassau shaly siltlo</u> a. Soil drainage: \(\sum \text{Well drained } \frac{100}{200} \) % of site \(\sum \text{Moderately well drained } \)	am. : Lcom	and Rock	-Outcrop ly silt loan
□Poorly drained % of site			
b. If any agricultural land is involved, how many acres of soil are classified within so Land Classification System? acres. (See 1 NYCRR 370).	il grou	ip 1 throug	th 4 of the N
acres. (See 1 MTCRR 370).			
Are there bedrock outcroppings on project site? \square Yes \square No a. What is depth to bedrock? $0 \rightarrow 5$ feet (in feet)			
			*

5. Approximate percentage of proposed project site with slopes: □0-10% <u>40</u> % □10-15% <u>55</u> % □15% or greater _____5 6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or the National Registers of Historic Places? □Yes ON 7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? 8. What is the depth of the water table? $0.5 \rightarrow 6$ (in feet) varies with season and location (Orange County Soil 9. Is site located over a primary, principal, or sole source aquifer? 10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? □Yes ⊠No 11. Does project site contain any species of plant or animal life that is identified as threatened or endangered? According to review of Significant Habitat Overlay No. 1 of 2, NYS DEC, Identify each species NA Bureau of Wildlife 12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations) Describe N/A 13. Is the project site presently used by the community or neighborhood as an open space or recreation area? ⊠No If yes, explain N/A14. Does the present site include scenic views known to be important to the community? □Yes 15. Streams within or contiguous to project area: Unnamed Tributary(Class B) to Tin Brook is 500ft. from si a. Name of Stream and name of River to which it is tributary __Tin_Brook(Class B where unnamed trib joins it) flows into the Wallkill River (ClassB) 16. Lakes, ponds, wetland areas within or contiguous to project area: None a. Name <u>N/A</u> _ b. Size (In acres) <u>N/A</u> 17. Is the site served by existing public utilities? No (there is an easement through a non-project □Yes a) If Yes, does sufficient capacity exist to allow connection? N/A Yes of the property) □No b) If Yes, will improvements be necessary to allow connection $N/A \square Yes$ □No 18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☑ Yes □No 19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article.8 of the ECL, and 6 NYCRR 6177 □Yes ØΝο 20. Has the site ever been used for the disposal of solid or hazardous wastes? □Yes ₩No **B.** Project Description 1. Physical dimensions and scale of project (fill in dimensions as appropriate) a. Total contiguous acreage owned or controlled by project sponsor 159.9 acres. b. Project acreage to be developed: 10.2 acres initially; 18.1 acres ultimately. c. Project acreage to remain undeveloped _______130-2 cres. d. Length of project, in miles: N/A (If appropriate) e. If the project is an expansion, indicate percent of expansion proposed ____ f. Number of off-street parking spaces existing N/A; proposed N/A g. Maximum vehicular trips generated per hour 2.5 (upon completion of project)? (20 per day) h. If residential: Number and type of housing units: N/A One Family Multiple Family Condominium Initially Ultimately i. Dimensions (in feet) of largest proposed structure _____ height; _ width; <u>60</u> j. Linear feet of frontage along a public thoroughfare project will occupy is? $\frac{1.910.8}{1.910.8}$ ft. = overall property bou along Kings Hill Road (project a 3 N/A = Not Applicable

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is away from public roads).

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	How much natural mater i.e., rock, earth, etc.) will be removed fro the site? 820,000 tons/cubic.yardin pl
3.	Will disturbed areas be reclaimed? ☐Yes ☐No ☐N/A
	a. If yes, for what intend_c purpose is the site being reclaimed? <u>pasture</u>
	b. Will topsoil be stockpiled for reclamation?
4 1	c. Will upper subsoil be stockpiled for reclamation? Yes No N/A (no subsoil in mining area)
	How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? 9.8 acres.
	Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project? □Yes 図No
	f single phase project: Anticipated period of construction months, (including demolition).
7. 1	f multi-phased:
	a. Total number of phases anticipated _5 (number).
	b. Anticipated date of commencement phase 1 Oct. month 2003 year, (including demolition).
	c. Approximate completion date of final phase <u>Sept</u> month <u>2018</u> year. d. Is phase 1 functionally dependent on subsequent phases? □Yes ⑤No
, A 1	Will blasting again design as a second secon
	Number of jobs generated: during construction <u>N/A</u> ; after project is complete <u>N/A</u> Number of jobs eliminated by this project <u>None</u> during mining operations 3-5
	Will project and the second se
11.	Will project require relocation of any projects or facilities? Yes Mo If yes, explain
12.	Is surface liquid waste disposal involved? □Yes ⊠No
	a. If yes, indicate type of waste (sewage, industrial, etc.) and amount
	b. Name of water body into which effluent will be discharged
13.	to authorities at the state of
	Will surface area of an opinion unto be de-
	Explain
	Is project or any portion of project located in a 100 year flood plain?
6.	Will the project generate solid waste? 🗆 Yes 🖾 No
	a. If yes, what is the amount per month N/A tons
	b. If yes, will an existing solid waste facility be used? Yes No N/A
	c. If yes, give nameN/A; locationN/A
	d. Will any wastes not go into a sewage disposal system or into a sanitary landfill? \square Yes \square No e. If Yes, explain $\underline{\hspace{1cm}}$ N/A
7	Will the project involve the discount of 111 and 171
٠.	Will the project involve the disposal of solid waste? \square Yes \square No a. If yes, what is the anticipated rate of disposal? $\underline{N/A}$ tons/month.
	h If you substitute and the section of the section
8. '	Will project use herbicides or pesticides? \square Yes \square No
	Will project routinely produce odors (more than one hour per day)? □Yes □No
	Will project produce operating noise exceeding the local ambient noise levels?
	Will project result in an increase in energy use?
	f yes , indicate type(s) Diesel fuel for equipment
2.	f water supply is from wells, indicate pumping capacity gallons/minute.
	Total anticipated water usage per day <u>none</u> gallons/day.
4. 1	Does project involve Local, State or Federal funding? \square Yes \square No f Yes, explain $\underline{N/A}$
	N/A = Not Applicable 4

25. Approvals Required:					Submittal
,		•	Туре	•	Date
City, Town, Village Board	□Yes	KINO			· ·
CXXX, Town, Willay & Planning Board	U Yes	Щνο	SPECIAL USE PERMIT		
City, Town Zoning Board	□Yes	12No			
City, County Health Department	□Yes	DXN0			
Other Local Agencies	□Yes	⊠No	¥		
Other Regional Agencies	□Yes	⊠No			
State Agencies	⊠Yes	□No	NYS DEC - Mining Per	rmit	
Federal Agencies	□Yes	⊠No			
C. Zoning and Planning Inform 1. Does proposed action involve a plan If Yes, indicate decision required: □zoning amendment Sonin □new/revision of master plan	nning or z	ce ⊠sp	ecial use permit	ivision	ite plan
2. What is the zoning classification(s)o				e. one fam	uly homes)
3. What is the maximum potential deve					
Residential (one f	amily re	esidence d	on 80,000 sq. ft. lot)	by the preser	it zoning?
4. What is the proposed zoning of the					
5. What is the maximum potential deve			if developed as permitted b		
6. Is the proposed action consistent with	h the rec	commended	l uses in adopted local land	3-4	SAME
7. What are the predominant land use(Residential/zoned RA-5(Mo	s) and zoi	ning classif		dius of propo	□Yes ŒNo osed action? :)
8. Is the proposed action compatible	with ad	joining/surr	ounding land uses within	a ¼ mile?	□Yes 🗓 No
If the proposed action is the subdiv	ision of I	land, how	many lots are proposed?		
a. What is the minimum lot s					
 Will proposed action require any au Will the proposed action create a fire protection)? 	demand	on(s) for the for any co	e formation of sewer or wate mmunity provided services	er districts? (recreation,	□Yes ⊠No education, police,
a. If yes, is existing capacity su		to handle n	rojected demand? \(\sum \text{Yes}	i □No 1	T / A
12. Will the proposed action result in the					V/A □Yes ☑No
a. If yes, is the existing road no					
			nandic the additional traffic	.: Lites	□No
D. Informational Details					
Attach any additional information a impacts associated with your proposal, payoid them.	is may be lease disc	e needed to cuss such in	o clarify your project. If the npacts and the measures wh	re are or ma ich you prop	sy be any adverse lose to mitigate or
E. Verification				•	
	: ad=b=			•	
I certify that the information provid			the best of my knowledge. ASSOCIATES	_	3/10/00
Signature Colonson		2002	Till-	Date	2/10/112
					•
f the action is in the Coastal Area, and yo	ou are a st	tate agency	, complete the Coastal Asses	sment Form l	pefore proceeding

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Responsibility of Lead Agency

General Information (Read Carefully)

- In completing the form the reviewer should be guided by the question: Have my responses and determinations been reasonable? The reviewer is not expected to be an expert environmental analyst.
- Identifying that an impact will be potentially large (column 2) does not mean that it is also necessarily significant. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simple asks that it be looked at further.
- The Examples provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of
 magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and
 for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate
 for a Potential Large Impact response, thus requiring evaluation in Part 3.
- The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.
- The number of examples per question does not indicate the importance of each question.
- In identifying impacts, consider long term, short term and cumlative effects.

Instructions (Read carefully)

- a. Answer each of the 19 questions in PART 2. Answer Yes if there will be any impact.
- b. Maybe answers should be considered as Yes answers.
- c. If answering Yes to a question then check the appropriate box (column 1 or 2) to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.
- d. If reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.
- e. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the Yes box in column 3. A No response indicates that such a reduction is not possible. This must be explained in Part 3.

IMPACT ON LAND 1. Will the proposed action result in a physical change to the project site?	Small to Moderate Impact	2 Potential Large Impact	Can In	3 npact Be ated By Change
Examples that would apply to column 2 • Any construction on slopes of 15% or greater, (15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%.			□Yes	□но
 Construction on land where the depth to the water table is less than 3 feet. 			□Yes	□No
 Construction of paved parking area for 1,000 or more vehicles. Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface. 			□Yes □Yes	□No
 Construction that will continue for more than 1 year or involve more than one phase or stage. 	Ď		□Yes	□No
 Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil) per year. 	· 🔼		□Yes	□No
 Construction or expansion of a sanitary landfill. Construction in a designated floodway. Other impacts			□Yes □Yes □Yes	□N° □N°
2. Will there be an effect ttiy unique or unusual land forms found on the site? (i.e., cliffs, dunes, geological formations, etc.)⊠NO □YES • Specific land forms:			□Yes	□No

	1	1 2	·	3
IMPACT ON WATER 3. Will proposed action affect any water body designated as protected? (Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL)	Small to Moderate Impact	Potential Large Impact	MitIga	pact Be ated By Change
ØNO □YES				
 Examples that would apply to column 2 Developable area of site contains a protected water body. 			□Yes	□No
 Dredging more than 100 cubic yards of material from channel of a protected stream. 			□Yes	□No
 Extension of utility distribution facilities through a protected water body. 	· 🗆		□Yes	□No
Construction in a designated freshwater or tidal wetland. Other impacts:			□Yes □Yes	□No
4. Will proposed action affect any non-protected existing or new body of water? Examples that would apply to column 2				
 A 10% increase or decrease in the surface area of any body of water or more than a 10 acre increase or decrease. 			□Yes	□No
 Construction of a body of water that exceeds 10 acres of surface area. Other impacts: 			□Yes □Yes	□No □No
5. Will Proposed Action affect surface or groundwater quality or quantity? 図NO □YES Examples that would apply to column 2				
 Proposed Action will require a discharge permit. 			□Yes	□No
 Proposed Action requires use of a source of water that does not have approval to serve proposed (project) action. 			□Yes	□No
 Proposed Action requires water supply from wells with greater than 45 gallons per minute pumping capacity. 			□Yes	□No
 Construction or operation causing any contamination of a water supply system. 			□Yes	□No
 Proposed Action will adversely affect groundwater. Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity. 			□Yes □Yes	□No
 Proposed Action would use water in excess of 20,000 gallons per day. 			□Yes	□№
 Proposed Action will likely cause siltation or other discharge into an existing body of water to the extent that there will be an obvious visual contrast to natural conditions. 			Yes	□No
 Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons. 	. 🗆		□Yes	□No
 Proposed Action will allow residential uses in areas without water and/or sewer services. 			□Yes	□No
 Proposed Action locates commercial and/or industrial uses which may require new or expansion of existing waste treatment and/or storage facilities. 			□Yes	□и₀
Other impacts:			Yes	□No
6. Will proposed action alter drainage flow or patterns, or surface water runoff? 図NO 、TYES Examples that would apply to column 2	•			
 Proposed Action would change flood water flows. 			□Yes	□No

	Small to Moderate Impact	2 Potential Large Impact	Can Im Mitiga	3 Ipact Be Ited By Change
 Proposed Action may cause substantial erosion. Proposed Action is incompatible with existing drainage patterns. Proposed Action will allow development in a designated floodway. Other impacts: 		0000	□Yes □Yes □Yes □Yes	□No □No □No
IMPACT ON AIR				
 7. Will proposed action affect air quality? Examples that would apply to column 2 Proposed Action will induce 1,000 or more vehicle trips in any given hour. 			□Yes	□No
 Proposed Action will result in the incineration of more than 1 ton of refuse per hour. 			□Yes	□No
 Emission rate of total contaminants will exceed 5 lbs. per hour or a heat source producing more than 10 million BTU's per hour. 			□Yes	□No
 Proposed action will allow an increase in the amount of land committed to industrial use. 			□Yes	□No
 Proposed action will allow an increase in the density of industrial development within existing industrial areas. 			□Yes	□№
Other impacts:dust from mining operations	E		□Yes	□No
IMPACT ON PLANTS AND ANIMALS				
8. Will Proposed Action affect any threatened or endangered species? 図NO □YES Examples that would apply to column 2		Total		
 Reduction of one or more species listed on the New York or Federal list, using the site, over or near site or found on the site. 			□Yes	□No
• Removal of any portion of a critical or significant wildlife habitat.			□Yes	□No
 Application of pesticide or herbicide more than twice a year, other than for agricultural purposes. 			□Yes	□No
• Other impacts:			□Yes	□No
9. Will Proposed Action substantially affect non-threatened or non-endangered species? MNO □YES Examples that would apply to column 2				
 Proposed Action would substantially interfere with any resident or migratory fish, shellfish or wildlife species. 			□Yes	□No
 Proposed Action requires the removal of more than 10 acres of mature forest (over 100 years of age) or other locally important vegetation. 			□Yes	□и₀
IMPACT ON AGRICULTURAL LAND RESOURCES				
10. Will the Proposed Action affect agricultural land resources? ロハロ はYES				
Examples that would apply to column 2 • The proposed action would sever, cross or limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.)			□Yes	□No

	Small to Moderate Impact	Potential Large Impact	Mitiga	3 npact Be ated By Change
 Construction activity would excavate or compact the soil profile of agricultural land. 			□Yes	□No
 The proposed action would irreversibly convert more than 10 acres of agricultural land or, if located in an Agricultutal District, more than 2.5 acres of agricultural land. 	[]x		□Yes	□№
 The proposed action would disrupt or prevent installation of agricultural land management systems (e.g., subsurface drain lines, outlet ditches, strip cropping); or create a need for such measures (e.g. cause a farm field to do. 			□Yes	□№
field to drain poorly due to increased runoff) Other impacts:			□Yes	□No
IMPACT ON AESTHETIC RESOURCES 11. Will proposed action affect aesthetic resources? PNO PYES (If necessary, use the Visual EAF Addendum in Section 617.21, Appendix B.) Examples that would apply to column 2 • Proposed land uses, or project components obviously different from				
or in snarp contrast to current surrounding land use patterns, whether man-made or natural.			Yes	□№
 Proposed land uses, or project components visible to users of aesthetic resources which will eliminate or significantly reduce their enjoyment of the aesthetic qualities of that resource. 			□Yes	□No
Project components that will result in the elimination or significant screening of scenic views known to be important to the area. Other impacts:			□Yes	
				LJ110
IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES 12. Will Proposed Action impact any site or structure of historic, pre- historic or paleontological importance? Examples that would apply to column 2				
 Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of historic places. 			□Yes	□No
 Any impact to an archaeological site or fossil bed located within the project site. 			□Yes	□No
 Proposed Action will occur in an area designated as sensitive for archaeological sites on the NYS Site Inventory. 			□Yes	□No
Other impacts:			□Yes	□No
IMPACT ON OPEN SPACE AND RECREATION 3. Will Proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities? Examples that would apply to column 2 NO TYES The permanent foreclosure of a future recreational opportunity. A major reduction of an open space important to the community.			□Yes □Yes	□zo
Other impacts:			☐Yes	□No

		~~~~ <u>~</u>		
IMPACT C TRANSPORTATION  14. Will there be an effect to existing transportation systems?  SYNO LYES  Examples that would apply to column 2	Small to Moderate Impact	Potential Large Impact	Can Im Mitiga	3 ipact Be ated By Change
<ul> <li>Alteration of present patterns of movement of people and/or goods.</li> <li>Proposed Action will result in major traffic problems.</li> <li>Other impacts:</li> </ul>			□Yes □Yes □Yes	□Ńo □No □No
IMPACT ON ENERGY				
15. Will proposed action affect the community's sources of fuel or energy supply? ■ NO □YES Examples that would apply to column 2  • Proposed Action will cause a greater than 5% increase in the use of				
any form of energy in the municipality.			Yes	□No
<ul> <li>Proposed Action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two family residences or to serve a major commercial or industrial use.</li> </ul>			□Yes	□No
Other impacts:			□Yes	□No
NOISE AND ODOR IMPACTS				
16. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action? □NO 图YES. Examples that would apply to column 2				
<ul> <li>Blasting within 1,500 feet of a hospital, school or other sensitive facility.</li> </ul>			□Yes	□No
Odors will occur routinely (more than one hour per day).			□Yes	□№
<ul> <li>Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures.</li> </ul>	[2]		□Yes	□No
<ul> <li>Proposed Action will remove natural barriers that would act as a noise screen.</li> </ul>			□Yes	□No
• Other impacts:		. 🗆	□Yes	□No
IMPACT ON PUBLIC HEALTH				
17. Will Proposed Action affect public health and safety?				
<ul> <li>Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission.</li> </ul>			□Yes	□No
<ul> <li>Proposed Action may result in the burial of "hazardous wastes" in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.)</li> </ul>			□Yes	□No
<ul> <li>Storage facilities for one million or more gallons of liquified natural gas or other flammable liquids.</li> </ul>			Yes	□No
<ul> <li>Proposed action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste.</li> </ul>			□Yes	□N0
Other impacts:			□Yes	□No
		1		

•				
IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD  18. Will proposed action affect the character of the existing community?  NO   YES	Small to Moderate Impact	2 Potential Large Impact	Can Imp Mitigat Project	oact Be ted By
Examples that would apply to column 2				
<ul> <li>The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%.</li> </ul>			□Yes	□No
• The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project	, 🗆		□Yes	□No
<ul> <li>Proposed action will conflict with officially adopted plans or goals.</li> </ul>			□Yes	□No
<ul> <li>Proposed action will cause a change in the density of land use.</li> </ul>			□Yes	
<ul> <li>Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community.</li> </ul>			□Yes	□No
<ul> <li>Development will create a demand for additional community services (e.g. schools, police and fire, etc.)</li> </ul>	. 🗆		□Yes .	□No
<ul> <li>Proposed Action will set an important precedent for future projects.</li> <li>Proposed Action will create or eliminate employment.</li> <li>Other impacts:</li> </ul>			□Yes □Yes □Yes	□No □No □No
	,			

19. Is there, or is there likely to be, public controversy related to potential adverse environmental impacts? 图NO □YES

If Any Action in Part 2 is identified as a Potential Large impact or If You Cannot Determine the Magnitude of Impact, Proceed to Part 3

## Part 3—EVALUATION OF THE IMPORTANCE OF IMPACTS

Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

#### Instructions

Discuss the following for each impact identified in Column 2 of Part 2:

- 1. Briefly describe the impact.
- 2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).
- 3. Based on the information available, decide if it is reasonable to conclude that this impact is important.

To answer the question of importance, consider:

- · The probability of the impact occurring
- The duration of the impact
- Its irreversibility, including permanently lost resources of value
- Whether the impact can or will be controlled
- The regional consequence of the impact
- Its potential divergence from local needs and goals
- Whether known objections to the project relate to this impact.

(Continue on attachments)

## ชอ-19-21 (Case of: 07-cv-10711-KMK Document 1-50 NEW YORK STATE DEPARTMENT OF NVIRONMENTAL CONSERVATION

	DIVISION OF MIN L RESOURCES		DEC #				
•	MINED LAND RECLAMATION PROGRAM		7. N	INED LAND PROJEC	Т	Yes	No
<b>40</b>	MINING PERMIT APPLICATION  MINED LAND FILE NUMBER (If assigned) 2. TELEPHONE NUM	RER	a.		e affected by mining site exceed 5 acres?		
, '· ,	-   -     -      (845) 895-270		ь.	Will the vertical depr	th from the top of the or exceed 20 feet?		
3.	NAME OF APPLICANT MEHLON TRUCKING INC.	·	C.	Will there be on-site products (eg. crushi	processing of mining ng, screening, washin	 1g)?	
4.	PERMANENT ADDRESS		d.	surface water body	thin 100 feet of a (eg. stream, lake)		
ļ	P.O. BOX 519		e.	or wetland area? Will any consolidate	d minerals be mined		
	WAUKILL STATE ZIP CODE NY 12589		f.	(eg. limestone, trap Will mining occur w	rock, sandstone)?		
5.			g.	dwelling? Will mining ever occ	•		
<u>_</u>	LEON MEHL (845) 895-27	00	g.	mean high water tal	ole?	<del></del>	
8.	If other than individual, provide Federal Taxpayer ID Number 4-	1643		✓ New	Renewal 🗆		cation
10	. a. PRESENT PERMIT TERM   b. COMING PERMIT TERM				AME OF MINERAL TO	) BE M	IINED
		ars	<del> </del>	44LE			
12	. LOCAL ORDINANCES a. Is mining prohibited at this location? Yes V No	ь.		he local government i at this location?	require any type of pe Yes No	rmit fo	or
13	. a. ARE ANY OTHER STATE MINING PERMITS CURRENTLY HELD	i b.		give DEC mine file n			
14	Has any owner, partner, corporate officer or corporate director of you	our org	anizatio	n ever held any of th	ese positions in anoth	ier	
	organization that has had a New York State mining permit SUSPENI reclamation bond FORFEITED?  Yes  on If YES, identify the			KED or has had a Ne	w York State mined la	and	
		•	. ,				
15	. ACREAGE SUMMARY (To be filled in by applicant)		······································		FOR OFFICIAL DEC	C USE	ONLY
	a. Total acreage controlled by owner at this location			159. 9 acres		acres	
	b. Total acreage permitted by DEC prior to this application			< 5 acres		acres	
	c. Total acreage affected since April 1, 1975			>6 acres		acres	
,	d. Total acreage approved by DEC as reclaimed since April 1, 1975			O_acres		acres	
1 .	e. Current affected acreage (c minus d)		:	>6 acres		acres	
	f. Acreage included in this application, but not previously approved			1Z± acres		acres	
1	g. New acreage to be affected during the coming permit term			12± acres		acres	開聯之
	h. Number of acres to be reclaimed during coming permit term			5 acres		acres	野野江
. 16	S. NAME OF MINING SITE KINGS HILL SHALE MIN	)E					
17	7. MINE LOCATION	18.	MAP	LOCATION			<u>i</u>
	Road KINGS HILL KOAD	a.	Quadr	angle Name	ALDEN		
	Nearest Road Intersection ROCK CUT ROAD	b.	15	5 minute 🖾 7½ minu		transferance	ne da da sala
	TOWN MONIGOMERY	NYTI	M'S	FOR DEC OFFICE	CIAL USE ONLY		
	County ORANGE	挪器	制度的研究 在影響的新	2012年1月2日 - 1912年 - 1		的 数 等 素 素 数 。 。 。 。 。 。 。 。 。 。 。 。 。	Allow N
19	NAME AND ADDRESS OF SURFACE LANDOWNER						
	LEON MEHL						
20	D. NAME AND ADDRESS OF MINERAL OWNER (If different)						
21	. I am the owner 🗹 in fee, 🗌 of the mineral rights of the property	v that i	s to be	mined by the above	applicant. I have read	the	
CO	ntents of the Mined Land Use Plan, which sets forth the applicant's n reby irrevocably consent and agree to the performance of the Mined I	ninina s	and recl	amation plan for the	property to be mined.	and I	2
.l De	epartment of Environmental Conservation. I further agree to allow acco	<b>ess</b> to 1	the prop	perty to department p	ersonnel for the purpo	ose of	
	inducting inspections or investigations in the regular course of their du	11188.	~~~~		DATE		
	John Mod S	::··;	:		2/15/05		
22	2. I hereby affirm, under penalty of perjury that information provided of	on this	form is	true to the best of m	y knowledge and beli	ef. Fa	lse
	atements made herein are punishable as a Class A misdemeanor pursu AME, TITLE AND SIGNATURE OF APPLICANT OR AUTHORIZED R				Law. DATE		
1	The state of the s	: 14	~== 1 F4	****			

# NARRATIVE

#### MINED LAND USE - PLAN

#### FOR THE

#### KINGS HILL ROAD SHALE MINE

#### **TOWN OF MONTGOMERY**

#### ORANGE COUNTY, NEW YORK

Prepared for

#### MEHLON TRUCKING INCORPORATED

Wallkill, New York

Prepared by

#### WEHRAN ENGINEERING, P.C.

666 East Main Street

Middletown, New York 10940

WE Project No. 07534 EP

July 1988

Revised July 1998*

Revised March 2003*

*Updated, modified and expanded July 1998

And March 2003 by

VINCENT J. DOCE ASSOCIATES

13 NEW ROAD

**NEWBURGH, NEW YORK 12550** 

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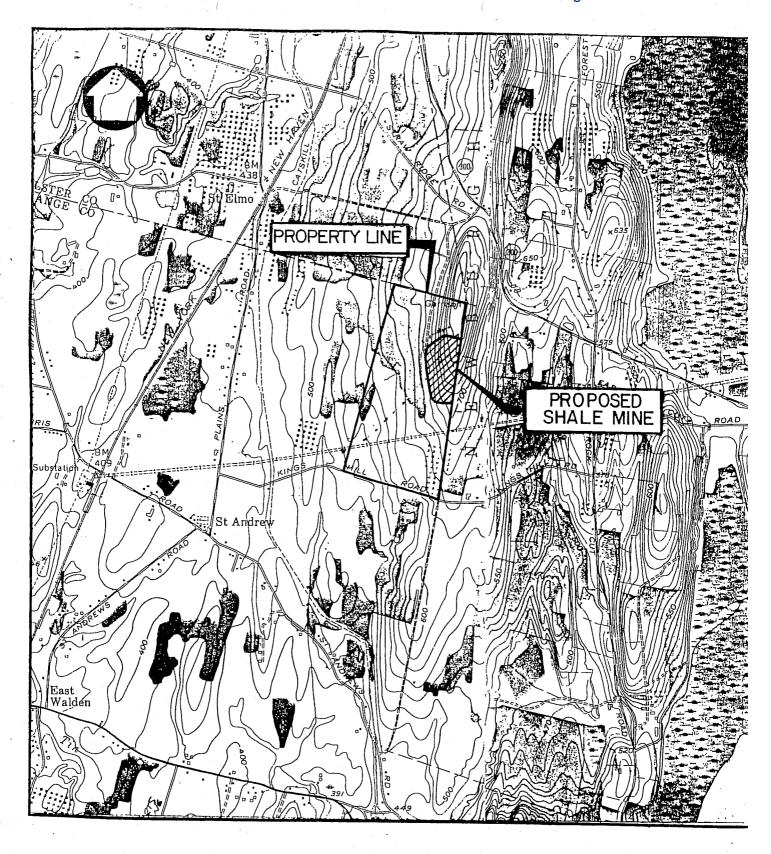
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#### 1.0 INTRODUCTION

Mehlon Trucking Inc. is applying for a mining permit which proposes use of an 17.3 acre site as shale mining operation. The site is located on the north side of Kings Hill Road in the Town of Montgomery, Orange County, New York. The 17.3 acre mine site to be permitted is contained within a 159.9-acre parcel owned by the applicant and bordering the Town of Newburgh, Orange County to the east and north, and the Town of Shawangunk, Ulster County to the north. The site is located on the Walden, New York, USGS 7.5-minute topographic quadrangle. The affected acreage includes areas for mining, shale stock piling, equipment storage, and topsoil stockpiling. An existing 2,100 linear foot access road provides access to the proposed mining area from Kings Hill Road. A new 2,200 linear foot road is to be constructed 630 feet westerly of the existing access road. The new road will have a much improved site distance to Kings Hill Road. Said New Access Road will be constructed in the early stages of Phase I of the mining operation.

This mining site will produce approximately 820,000 cubic yards (in place) of graded, crushed shale. All of the material excavated from the mine will be transported off site and sold.

This Mined Land-Use Plan and the accompanying permit application have been prepared to meet the requirements necessary to obtain a mining permit from the New York State Department of Environmental Conservation (NYSDEC).



TOPOGRAPHY TAKEN FROM WALDEN & NEWBURGH, N.Y., 1957
PHOTOREVISED, 1981
U.S.G.S. QUADRANGLE MAP.
7.5 MIN. SERIES

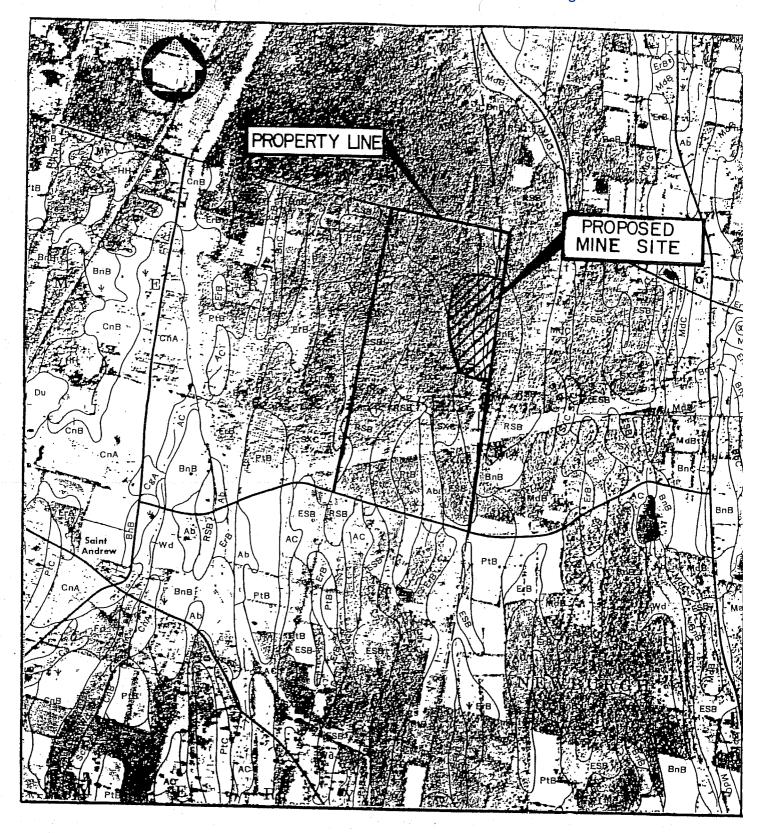
SCALE: 1"= 2000"



QUADRANGLE LOCATION

FIGURE 1

SITE LOCATION MAP



SOURCE:

History ...

SCALE: 1" = 15,840' SOIL MAP ORANGE COUNTY, N.Y. MAP COMPILED BY CARTOGRAPHIC SECTION, DIVISION OF SOIL SURVEY, BPISAE, FROM U.S. GEOLOGICAL SURVEY QUADRANGLES AND ARIEL PHOTOGRAPHS.

FIGURE 2

SOILS MAP

The purpose of the plan is to provide a description of mining and reclamation operations to be used at the site.

#### 2.0 MINING PLAN

#### 2.1 EXISTING LAND USE-DESCRIPTION

The proposed shale mine is located in northeastern Orange County in the Town of Montgomery (Figure 1). The mine is located in an area which is zoned for residential use (see Section 3.0). the proposed mine will yield material which will be sold for use off site.

The existing land use within the proposed excavation area is comprised of areas of heavy woodland, brush, and the existing mine. The wooded area, which covers about 60 percent of the proposed excavation area is an unmanaged, deciduous forest with small shrubs and bushes. The remaining area contains the existing mine which covers approximately 40 percent of the proposed excavation area. This mine has been in existence between 20 to 30 years and was last permitted by the NYSDEC in 1983. the mined area is devoid of vegetation and contains material stockpiles and exposed mining cuts. This existing disturbance will be reclaimed as part of the proposed mining and reclamation plan. The various land-uses described above are shown on the attached Engineering Plans (Sheet 1 of 10).

The site is located within a single family residential agricultural (RA-5) zone as defined by the Town of Montgomery. The land use adjacent to the proposed mine site is predominantly forest with some idle farmland. The nearest residences to the proposed mine are approximately 500 feet to the east in the Town of Newburgh and are buffered from the site by the crest of the shale ridge. As additional buffer zone between the adjacent land owners and the mine site, a boundary woodland will be preserved around the excavation area to act as a visual screen. This Mined Land-Use Plan has been developed to conform with the local regulations and zoning laws, as well as the State mining regulations.

The major soil groups present at the site are Bath-Nassau shaley silt loam and Rock Outcrop-Nassau complex shaley silt loam (Figure 2). These soils consist of a surface layer of dark grayish brown shaley silt loam and a subsoil of yellowish brown very shaley silt loam. Hard, black tilted shale is at a depth of 10 to 20 inches. The rock outcrop protrudes as exposed ledges and angular beds of tilted and folded shale bedrock.

Based on an assessment of published soils and geologic information and a visual inspection of the existing quarry, it is apparent that the shale is present at the proposed mine beyond the proposed limits of excavation. Based on the outcrops in the soil and the nature of the topography, it is assumed that a ridge of shale extends northerly along the town of Montgomery – Town of Newburgh border and into the Town of Shawangunk.

#### 2.2 MINING OPERATION

The proposed mining operation will be a surface consolidated mine which will remove shale by ripping, drilling and blasting. Processing activities to be utilized at the site consists of a dry screening of the excavated shale, with primary and/or secondary crushing of larger stone, depending on the proposed use of the material. The excavated material will be transported off site for use at construction sites in northern Orange and southern Ulster Counties.

Mining is tentatively scheduled to begin in the fall of 2003, and will continue for approximately 15 years, or until all minable material is excavated to the proposed final grade. Mining will be accomplished in five, three-year phases. When all mining has been concluded, final reclamation of the site will be completed within six months.

#### 2.3 MINING METHOD

#### 2.3.1 Sequence of Operations

It is proposed that the mining operation be conducted in five phases as shown on the Engineering Plans (Sheet 2 of 10), with the phase numbers reflecting the sequence of the operation through the mine site. Generally, mining activities will begin from the highest elevation in a phase area and progress downward. This prevents large mining cuts from being left un reclaimed for extended periods of time. Phase 1 will be undertaken first, however, to allow for reclamation of the existing mine faces in a timely fashion. The

phase boundaries have been located based upon the expected life of the mine and on the volume of material to be excavated during each triennial permit period. Each phase will provide approximately 250,000 cubic yards of excavated shale over a period of three years.

Reclamation (See Section 3.0), will take place concurrently with mining activities. Typically, as mining progresses from one phase to the next, reclamation work will begin on the first phase. It is anticipated, that when mining is completed on the second phase, the previous phase will have been completely including grading, topsoil redistribution, and seeding. The same steps will occur in subsequent phases so that reclamation will begin in the recently completed phase as mining moves into the next phase. The total mined area will be reclaimed within six months after the cessation of mining. An exception to this progression through the site will be those areas of Phase 1 which will be utilized throughout the life of the mine. Specifically excluded are haulage ways, the erosion and sediment control measures, the mine operation area, the soil stockpile and the shale stock pile. Reclamation of these areas will be completed within six months of the cessation of mining.

The maximum height of any vertical face will be 30 feet, as specified by NYSDEC. A vertical face height of ten feet, however, will be more typical of this proposed mining activity. Once an active mine face reaches this height, reclamation will begin prior to continuation of mining.

The following general mining sequence will be used at this site:

Prior to the removal of any material, sediment barriers and stormwater diversions with stabilized outlets will be installed.

Within six months following the commencement of mining operations, the new access road will be installed; the entrance culvert will be replaced and enlarged, bituminous pavement will be applied at the entrance to Kings Hill Road, and an entrance gate will be installed (Sheet 5 of 10). Stormwater culverts will be installed as shown on the Engineering Plans for the further control of stormwater.

Mining will begin at the center of the site along the northern edge of Phase I, and will then progress from the northeastern corner (Phase II) toward the southeast (Phase V) until all material has been extracted down to the proposed final grade.

Prior to the mining cut, stormwater diversions will be installed up slope from the area to be mined and sediment barriers will be installed downslope. Structures will be installed as shown in the Engineering Plans.

Following stabilization of the erosion control measures, the ground surface will be stripped of all remaining vegetation. This material will be shredded and used as mulch or hauled away and disposed of in an appropriate manner.

All overlying topsoil will be removed and placed in the topsoil storage area. The topsoil will be protected from erosion by seeding the stockpile with temporary vegetative cover which will be established as soon as possible after stockpiling.

Sediment control barriers will be installed as shown on Sheet 2 of 5.

Once all topsoil is removed, the shale will be excavated by either ripping or blasting. The choice of method will depend on the desired hourly rate of production and the unit production costs. Fragmented material will be place in a temporary stockpile within the permit area. The material will then be processed on site, loaded into trucks, and taken off site.

Processing by an on-site crusher will be performed at the mine operation area before the shale is transported. Dry screening, with primary and/or secondary crushing, are being considered at this site. Any dust from the processing operation will be controlled with water mist spray.

Material will be transported over existing haulageways within the permit area which intersect with the access road.

As mining progresses, spoil material will be hauled back to previously mined areas and used for backfilling. This will help maintain concurrent reclamation.

The areas being reclaimed will be backfilled to achieve a maximum outslope of three horizontal to one vertical (18 degrees). All areas will be backfilled such that drainage will be controlled, erosion minimized, and a stable backfill configuration achieved.

After final grading is complete, topsoil, or material suitable for sustaining growth,

will be redistributed and prepared for seeding. All efforts will be made to utilize topsoil from areas actively being cleared for mining thereby minimizing the amount of topsoil stockpiled at the site. The graded soil will be tested to determine lime and fertilizer requirements. Appropriate treatment will be applied to accomplish revegetation. The area will then be seeded and mulched in accordance with the revegetation plan provided in the Mined Land-Use Plan.

#### 2.3.2 Excavation and Grading

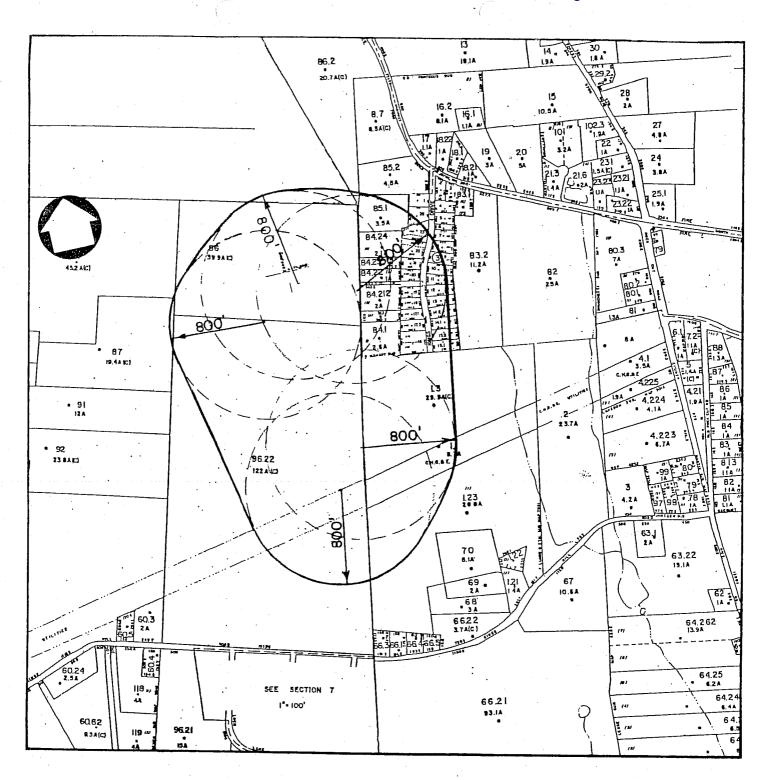
All excavations and stockpiled topsoil material will be graded to provide appropriate slope control. The material placed in the topsoil storage area will be graded to a maximum outslope of two horizontal to one vertical (26 degrees).

Drilling benches will be established above the shale area to be removed. A specific drilling pattern will be used to help facilitate blasting. The holes will be loaded with explosives and the rock will be blasted loose. The excavated rock faces will be terraced back in a series of small benches (Sheet 4 of 10). The benches will have vertical slopes on the highwalls while the rock is being removed. The benches will be eliminated by grading material into them when the area is reclaimed. All excavation at this site will be at least 500 feet from any occupied dwellings, and no portion of the permit area, including the access road, will be located closer than 50 feet to the surrounding property line.

#### 2.3.3 Blasting

#### General

All blasting conducted at this site will comply with applicable local, State, and



#### SOURCE :

TOWN OF MONTGOMERY & TOWN OF NEWBURGH TAX MAPS APPROX. SCALE: |"= 800"

FIGURE 3

PRE BLASTING SURVEY AREA

Federal regulations in the use of explosives. Blasting will be limited to two days per month, one shot per weekdays, with a maxium weight of explosives equal to 600 pounds.

Blasting will be conducted to prevent injury to persons and damage to public or private properties outside the permit area. All blasting will be conducted under the direction of a licensed certified blaster after preparation of a blasting plan. Persons responsible for blasting operations will be familiar witht the blasting plan and site-specific performance standards. A certified blaster and at least one other person will be present at the furing of each blast.

#### <u>Vibration Control Program</u>

#### Pre-Blasting Surveys

Prior to the initiation of blasting, the applicant will inform, in writing, all residents or owners of dwellings and other structures within 800 feet of the permit area (Figure 3) of procedures to request a pre-blast survey. The request for a preblast survey should be made by the resident in writing directly to the applicant or to the NYSDEC, which will notify the applicant. The applicant will promptly conduct a pre-blast survey of the dwelling or structure. If a structure is renovated, modified, or added to subsequent to a pre-blast survey, then, upon request, a survey of such additions or renovations shall be performed.

The survey will determine the condition of the dwelling or structure and document any pre-blasting damage and other physical conditions that could reasonably be affected by the blasting. Structures such as pipelines, cables, transmissions line, cisterns, wells, and other water systems, warrant special attention. However, the assessment of these

Page 31 of 45

structure may be limited to surface conditions and readily available data unless additional information is specifically requested.

Document 1-50

A written report of the survey will be promptly prepared and signed by the person who conducted the survey. The report may include recommendations of any special conditions or proposed adjustments to the blasting procedure which should be incorporated into the blasting plan to prevent damage. If the resident or structure owner or his representative accompanies the surveyor, the report shall contain the name of this person. Copies of the report shall be promptly provided to the person requesting the survey and to the NYSDEC. If the person requesting the survey disagrees with the results of the survey, he may submit in writing, to the applicant and the NYSDEC, a detailed description of the specific areas of disagreement.

#### **Ground Vibration**

In all blasting operations, the maxium ground vibration will not exceed 1.00 inches per second. The maximum ground vibration at the location of any dwellling or building outside the permit area will be established using scale-distance equations. The maxium weight of explosive to be detonated in any eight millisecond delay period will be determined using the following scale-distance equation:

$$W = (D/55)$$

Where:

the maxium weight of explosives, in pounds, that can be detonated, eight millisecond period within any

the distance, in feet, from the blasting site to the nearest protected

structure.

The use of this formula should result in a maxium peak particle velocity of less than 1.00 inch per second. Since the closest protected structure is at least 400 feet from the mining area, the maxium weight of explosive to be detonated per eight millisecond delay period will be 53 pounds. Use of this scale-distance equation should eliminate the need for constant seismic monitoring. To insure that peak particle velocities are acceptable, seismic monitoring will be performed during each of the first four blasts, and thereafter on a quarterly basis. The results of this monitoring will be submitted to the NYSDEC.

A typical borhole pattern used at this site will range from 5 to 30 holes. This will provide for an average total weight of burden of 200 tons per blast. The blasting will be conducted with dynamite or ANFO (ammonium nitrate, fuel oil mixture). The holes will be loaded and a minium of one foot stemming will be provided. Blasts will be detonated using blasting caps and sequential board which provide an eight millisecond delay.

#### Control of Airblasts

Airblasts shall be controlled so that it does not exceed the values as sepcified in Table 1, at any dwelling or building outside the permit area

In all cases except those involving the use of C-weighted slow response devices, the measuring systems used will have a flat frequency response of at least 200 Hz at the upper end. The C-weighted shall be measured with a Type I sound level meter that meets the standard American National Standards Instutiute (ANSI) 91.4-1971 specifications.

If neccessary to prevent damage, lower maximum allowable air blast levels will

be specified for use in the vicinity of a specific blasting operation.

#### **Blast Warnings**

The following blast warnings, all-clear signals, and site access control procedures will be used at this site.

At least 10 minutes before each blast, access to the area will be controlled by company personnel. Before each blast is detonated, the following types of audible warnings will be given. Five minutes prior to detonation, three long siren or horn blasts will be sounded. One minute prior to each detonation, three short siren or horn blasts will be sounded. After each detonation, one long siren or air horn will be sounded for the all-clear signal.

Access to the blasting area will be controlled to prevent the presence of unauthorized personnel during blasting until the blaster has reasonably determined:

That no unusual circumstance, such as imminent slides or undetonated charges exist.

That access to and travel in or through the blasting area can be safley removed.

Each person whithin the premit area and each person who resides or regularly works within a quarter mile of the premit area shall be notified in writing of the meaning of these signals prior to the commencement of blasting. This information will also be provided in writing to all appropriate local government agencies.

#### 2.4 POLLUTION CONTROL

#### 2.4.1 Dust Control

Dust will be controlled at this site by: 1) maintaining the roads in good condition (kept well compacted and sprayed with water during dry periods); 2) topsoil stockpiles will protected from wind erosion by establishing temporary vegetation after the topsoil has been graded in place; and 3) dust from the mining area will be controlled by minimizing the area being excavated at any one time, and by reclaiming mined-out areas as soon as possible.

#### 2.4.2 Noise Control

Noise from the proposed mine site will be controlled at all times. All equipment used at the site will be adequately muffled to prevent excessive noise. Noise will also be controlled by the use of screening. The natural screen of deciduous forest that surrounds the entire permit area will help to dampen noise generated by mining activity.

Furthermore, nearby residences are situated at a lower elevation than the proposed mine and on the far side of the shale ridge.

Noise levels were measured at the applicant's crusher at a mine site located on Orchard Drive in the Town of Shawangunk, Ulster County (See Figure 4). A digital sound level meter was used (See Figure 5). Levels taken 100 feet from the crusher were found to be in excess 81db, accept where a berm had been constructed to the rear of the crusher. Based on the "inverse square law" mentioned in the NYSDEC "Assessing and Mitigating Noise Impacts" 10/6/00, every doubling of the distance from the crusher

NORTH

66 3b

LEVEL

<u>6</u>

+ 300' 60 db

+200' 61 16

+ 100' 62 db

BERM

LOADER FEED
HER
WE PLANT
PERATION

# + 000 qp 92

+ 100' BOB

+200' 71db

+300' 67 db

MEHLON TRUCKING ORCHARD DRIVE CRUSHER NOISE LEVEL MEASUREMENT

Figure 4

(greater than 50 feet) would reduce the Sound Pressure Level (SPL) by 6db. Based on that theory alone the levels would be an acceptable 55db at approximately 700 feet from the crusher.

The nearest receptors, residential homes along Kings Drive, are located to the east of the proposed mining site, in an AR (Agricultural-Residential) Zoning District in the Town of Newburgh. The Town of Newburgh adopted a noise ordinance in 1992 (L.L. No. 1-1992) which states the permissible SPL from 8:00 a.m. to 10:00 p.m. to be 65db and from 10:00 p.m. to 8:00 a.m. to be 56db.

Since the nearest residence is more than 700 feet from the proposed crusher site, in the Town of Newburgh it would seem no mitigation would be necessary based on the above mentioned data.

Once the above said crusher is moved to the proposed site, additional sound measurements should be taken. The north-south orientation of the crusher will be the same at the proposed mine as it presently exists at the Orchard Drive. Berms similar to the one at Orchard Drive location could be used to mitigate any additional increase in the SPL caused by the conditions at the new mine.

Hours of operation at the proposed mine will be 8:00 a.m. to 4:30 p.m. Monday thru Friday and 8:00 a.m. to 3:30 p.m. on Saturdays. No mining will be done on Saturdays or holidays.

#### 2.4.3 Drainage and Water Control

The local surface water system will not be significantly affected by the mining activity at this site. The excavation of rock from the existing mine will return the affected area to its approximate configuration prior to the original mining activity. Further mining activities are not expected to alter existing drainage patterns or affect runoff volumes.

Mining and reclamation activities are not expected to significantly affect the local water balance.

The primary concern during active mining operations is the potential for increase in sediment in the surface water runoff. Several methods will be utilized to control surface water runoff at this site: 1) erosion will be controlled by concurent reclamation of the mining areas; 2) by developing the site in phases, the amount of area to be disturbed at any one time will be controlled, minimizing the potential, for soil erosion; 3) completed areas will be graded and seeded as quickly as possible after mining is concluded. The quick establishment of vegetation on the bare ground surface will reduce runoff and minimize the potential for erosion; and 4) runoff will be diverted away from the active mine areas further minimizing the potential for erosion.

the active mine areas further minimizing the potential for erosion.

The primary drainage control measures to be used at the site will be a series of storm water diversions and sediment barriers to be installed over the site in sequence with the mining phases. The diversions will route stormwater from stabilized areas away from the active mine areas, thereby reducing the contact of clean water with erosion-prone ground surfaces. Sediment barriers, located downslope from the active mine areas, will trap any sediment carried in the runoff from those areas prior to discharge of the runoff.

Diversions will remain in place until final reclamation. Sediment barriers will be relocated as mining progresses from one phase to the next. Regular cleaning of the sediment barriers will provide needed material for use as backfill in concurrent reclamation activities.

#### 2.4. 4 Screening

Several types of visual screening surround this proposed mine site and the site is not visible from either Kings Drive or Kings Hill Road. A natural screen will be maintained around part of the site by leaving a boundary of deciduous woodland around the permit area. The trees act as a visual screen shielding the mine site from the public and also help to confine dust and reduce noise levels.

#### 3.0 RECLAMATION PLAN

#### 3.1 LAND-USE OBJECTIVE

After mining has been completed, the permit area will be reclaimed for a use

consistent with residential development. Reclamation will include the mining area, topsoil storage area, the mine operation area, and the utility building. The final grades have been designed to blend into the existing ridge topography of the site after mining is completed. The site will be reclaimed to achieve a post-mining land-use of pasture land. This is consistent with the land use of the adjacent property and the RA-5 residential/agricultural zoning.

#### 3.2 METHOD OF RECLAMATION

#### 3.2.1 Disposition of Materials

After excavation is completed at the site, the permit area will be reclaimed. All refuse and personal property will be removed from the site area during reclamation and disposed of in an appropriate manner. All equipment currently located on the site and the utility building will also be removed.

As the existing mine face is excavated, a stepped cross-section will be created (Sheet 4 of 10). The final backfill configuration will be achieved by backfilling each one of these small benches to a maximum outslope of three horizontal to one vertical (18 degrees). The material used for this will come from the site itself. As rock is blasted from the highwall, small pieces of rubble (spoil) will be created. This material will be utilized to backfill the highwalls. Once the spoil has been graded, topsoil will be redistributed onto the site. The topsoil will be removed from the storage area and graded onto the disturbed area. The topsoil will consist of the original topsoil material, and additional material suitable for sustaining vegetation. It will be graded to a minimum depth of six inches.

#### 3.2.2 Access Road and Haulageways

The access road to be used at this site will not be reclaimed when mining activity is concluded. The road will, however, be regraded and crowned and left as an improvement to the property after mining is completed. Access to the site will be controlled by a gate placed at the road entrance.

Haulageways will be reclaimed by grading and seeding in accordance with the Engineering Plans (Sheet 3 of 10).

#### 3.2.3 Drainage

After mining has been completed, the affected area will be graded to the site's approximate original slopes which allow natural runoff of surface water. A sediment barrier will remain in place around the perimeter for use as sediment control. This will provide sufficient protection from sedimentation until vegetation is established on the permit area. Once vegetation has been established and the potential for erosion has been mitigated, the barrier will be removed and the embedding trench will be seeded.

#### 3.2.4 Grading

All areas within the permit area will be graded into a stable backfill configuration. The proposed final grades to be established on the affected area are shown on the Engineering Plans (Sheet 3 of 10). A slope of three horizontal to one vertical (18 degrees) will be established around the mine face. Stockpile areas will be removed if necessary, or graded to achieve the approximate reclaimed contour of the property. This will help to re-establish the natural drainage of the site.

#### 3.2.5 Revegetation

All areas which will be disturbed within the permit area will be revegetated. Two seed mixes are recommended for use on the distributed areas and are shown on the Engineering Plans (Sheet 4 of 10).

Temporary vegetative cover will be used for the topsoil stockpile and any other area needing quick cover. Permanent cover will be used for final reclamation and provides an attractive and durable long-term cover for bare soil. Seeding schedules and mulching guidelines are also presented in the Engineering Plans (Sheet 4 of 5).

The following procedure should be used for seeding at this site:

The seed bed should be prepared by discing, unless seeding follows regrading and topsoil redistribution closely enough that the soil provides an adequate seed bed without mechanical treatment.

Major seeding can be accomplished with a hydro seeder, with smaller areas being seeded with a hand cyclone seeder. Grasses, lime, and fertilizers (at rates determined from appropriate analyses) should be applied at approximately the same time. The bench areas prepared on the graded slopes will be seeded with hearty myrtle or similar ground cover to enhance erosion control.

#### 3.3 SCHEDULE OF RECLAMATION

Reclamation of an area (phase) will begin after all mining has ceased in that area (phase). Final reclamation, including grading and seeding, will be completed within six months of cessation of mining in Phase V. Once final reclamation activities have been completed, the NYSDEC will be notified, and an inspection will be scheduled to determine that the area was reclaimed in accordance with the Mined Land-Use Plan.

Upon commencement of mining operations, reclamation can begin immediately on that portion of Phase I located easterly and northeasterly of the topsoil stockpile and along the existing haulage way. All other reclamation will follow the phasing sequence.

#### 4.0 SELECTED REFERENCES

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## TABLE 1

#### AIRBLAST LIMITATION

Lower Frequency Limit of	Maxium
Measuring System in Hz (+/-3 dB)	Level in dB
0.1 Hz of lower - flat response	134 peak
2 Hz or lower - flat response	133 peak
6 Hz or lower - flat response	129 peak
C-weighted slow response	104 neak dB(